

WHAT IS CLAIMED IS:

1. An analytical test device for detecting the presence of one or more analytes in a biological sample, which device comprises a plurality of wells, wherein said wells do not communicate with each other and wherein each well comprises:

- 5 (a) a filter stack;
- (b) at least one first reagent capable of recognizing the one or more analytes; and
- (c) a second reagent capable of generating a signal upon detection of the one or more analytes;

10 wherein the first reagent in each of the wells is capable of recognizing different analytes.

2. The device of Claim 1, wherein the filter stack comprises:

- (a) a porous membrane; and
- (b) absorbent material in contact with the membrane,
- wherein the membrane and the absorbent material are in fluid communication.

15 3. The device of Claim 2, wherein the membrane comprises a material selected from the group consisting of glass, nylon and cellulose.

4. The device of Claim 2, wherein the absorbent material is cellulose.

5. The device of Claim 4, wherein the cellulose is absorbent cellulose paper.

6. The device of Claim 1, wherein the one or more analytes comprises one or more viral antigens.

7. The device of Claim 6, wherein the one or more viral antigens is selected from the group consisting of Influenza A and Influenza B antigens.

5 8. The device of Claim 1, wherein the at least one first reagents comprises an antibody specific for the one or more analytes.

9. The device of Claim 8, wherein the antibody includes a label conjugated thereto.

10. The device of Claim 9, wherein the label is an enzyme.

10 11. The device of Claim 1, comprising two first reagents, wherein one of the first reagents comprises an antibody specific for Influenza A and the second of the first reagents comprises an antibody specific for Influenza B.

12. The device of Claim 11, wherein each antibody includes a label conjugated thereto.

13. The device of Claim 12, wherein the label is an enzyme.

14. The device of Claim 9, wherein the second reagent comprises a chromogen reactive with the label to provide a color development.

15. The device of Claim 1, wherein the device comprises two wells.

16. The device of Claim 2, wherein the membrane includes at least one binder specific for the one or more analytes.

17. An analytical test device for detecting the presence of one or both of Influenza A and Influenza B in a biological sample, which device comprises a plurality of wells, wherein said wells do not communicate with each other and wherein each well comprises:

- (a) a filter stack;
- (b) at least one first reagent capable of recognizing one of Influenza A or Influenza B; and
- (c) a second reagent capable of generating a signal upon detection of said Influenza A or Influenza B.

18. The device of Claim 17, wherein the filter stack comprises:

- (a) a porous membrane; and
 - (b) absorbent material in contact with the membrane,
- wherein the membrane and the absorbent material are in fluid communication.

19. The device of Claim 18, wherein the membrane comprises a material selected from the group consisting of glass, nylon and cellulose.

20. The device of Claim 18, wherein the absorbent material is cellulose.

21. The device of Claim 20, wherein the cellulose is absorbent cellulose paper.

5 22. The device of Claim 17, wherein the at least one first reagents comprises an antibody specific for Influenza A or Influenza B viral antigens.

23. The device of Claim 22, wherein the antibody includes a label conjugated thereto.

24. The device of Claim 23, wherein the label is an enzyme.

10 25. The device of Claim 17, comprising two first reagents, wherein one of the first reagents comprises an antibody specific for Influenza A and the second first reagent comprises an antibody specific for Influenza B.

26. The device of Claim 24, wherein the second reagent comprises a chromogen reactive with the label to provide color development.

15 27. The device of Claim 17, wherein the device comprises two wells.

28. A method for detecting the presence of one or more analytes in a biological sample, the method comprising:

(a) contacting the sample suspected of containing the one or more analytes with a membrane in each of a plurality of wells, wherein the one or more analytes non-immunologically attaches to the membrane;

(b) incubating the membrane with at least one first reagent, wherein the at least one first reagent comprises at least one antibody specific for the one or more analytes and having a label conjugated thereto, whereby the one or more analytes bind to the at least one antibody to give a bound fraction on the membrane;

(c) contacting the membrane with a second reagent capable of generating a signal to detect the presence of the bound fraction; and

(d) detecting the one or more analytes upon generation of the signal; wherein the at least one first reagents is capable of recognizing different analytes.

29. The method of Claim 28, wherein the plurality of wells comprises two wells.

30. The method of Claim 28, further comprising separating the membrane having non-immunologically attached analyte from the sample by causing the sample to pass through the membrane.

31. The method of Claim 28, wherein the one or more analytes comprises one or more viral antigens.

32. The method of Claim 31, wherein the one or more viral antigens is selected from the group consisting of Influenza A and Influenza B antigens.

33. The method of Claim 28, wherein the label is an enzyme.

34. The method of Claim 28, wherein the second reagent comprises a chromogen reactive with the label to provide a color development.

35. The method of Claim 28, comprising incubating the membrane in one of the wells with a first reagent comprising an antibody specific for Influenza A and incubating the membrane in another of the wells with a first reagent comprising an antibody specific for Influenza B.

36. A method for detecting the presence of and distinguishing between Influenza A viral antigens and Influenza B viral antigens, comprising:

(a) contacting, in both a first well and a second well, a sample suspected of containing the viral antigens of one or both of Influenza A and Influenza B with a membrane, wherein the viral antigens non-immunologically attach to the membrane;

(b) incubating the membrane in the first well with a first reagent comprising an antibody specific for Influenza A viral antigens, whereby the Influenza A viral antigens, if present, bind to the antibody to give a bound fraction on the membrane;

(c) incubating the membrane in the second well with a first reagent comprising an antibody specific for Influenza B viral antigens, whereby the Influenza B viral antigens, if present, bind to the antibody to give a bound fraction on the membrane;

(d) contacting the membrane in the first and second wells with a second reagent capable of generating a signal upon detection of one or both of Influenza A and Influenza B viral antigens; and

(e) detecting the presence of one or both of Influenza A and Influenza B upon generation of the signal.

37. The method of Claim 36, wherein the signal is colorimetric.

38. A kit for performing an analytical test for detecting the presence of one or more analytes in a biological sample, the kit comprising:

(a) an analytical test device having a plurality of wells, wherein the wells do not communicate with each other;

(b) a first detection reagent capable of recognizing a first of the one or more analytes;

(c) a second detection reagent capable of recognizing a second of the one or more analytes; and

(d) a reagent capable of generating a signal upon detection of the one or more analytes.

39. The kit of Claim 38, wherein the device comprises two wells.

40. The kit of Claim 38, wherein said kit is capable of differentiating analytes when more than one analyte is present in the sample.

41. The kit of Claim 38, wherein the device includes a filter stack in each of the wells.

5 42. The kit of Claim 41, wherein the filter stack in each of the wells comprises a porous membrane and an absorbent material in contact with the membrane such that the membrane and the absorbent material are in fluid communication.

43. The kit of Claim 42, wherein the membrane includes at least one binder specific for the one or more analytes.

10 44. The kit of Claim 38, wherein the first detection reagent comprises an antibody specific for a first analyte and the second detection reagent comprises an antibody specific for a second analyte.

45. The kit of Claim 44, wherein the antibody of the first detection reagent and the antibody of the second detection reagent each include a label attached thereto.

15 46. The kit of Claim 45, wherein the labels are enzymes.

47. A kit for performing an analytical test for detecting the presence of and distinguishing between Influenza A viral antigens and Influenza B viral antigens in a biological sample suspected of containing one or both of Influenza A viral antigens and Influenza B viral antigens, the kit comprising:

- 5 (a) an analytical test device having a plurality of wells, wherein the wells do not communicate with each other;
- (b) a first detection reagent capable of recognizing Influenza A viral antigens;
- (c) a second detection reagent capable of recognizing Influenza B viral antigens; and
- (d) a reagent capable of generating a signal upon detection of one or both of Influenza A viral antigens and Influenza B viral antigens.

48. The kit of Claim 47, wherein the test device comprises two wells.

49. The kit of Claim 47, wherein the first detection reagent comprises an anti-Influenza A monoclonal murine antibodies (2)-enzyme conjugate.

50. The kit of Claim 47, wherein the second detection reagent comprises an anti-Influenza B monoclonal murine antibody-enzyme conjugate.

51. The kit of Claim 47, wherein the reagent capable of generating a signal comprises chromogen.

52. The kit of Claim 47, further comprising an extraction reagent.

53. The kit of Claim 52, wherein the extraction reagent comprises a mucolytic agent.

54. The kit of Claim 47, further comprising at least one wash reagent.

5 55. The kit of Claim 47, further comprising a stop reagent.

56. The kit of Claim 55, wherein the stop reagent comprises citric acid.

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